

Departmental Series
A.E. 315

POTTED PLANT AND CUT FLOWER SALES FOR 1955, 1956, and 1957
THROUGH FOUR COLUMBUS, OHIO, SUPERMARKETS

by

R. W. Sherman and H. C. Williams

Department of Agricultural Economics and Rural Sociology
Ohio Agricultural Experiment Station
Wooster, Ohio

December, 1960

Potted Plant and Cut Flower Sales for 1955, 1956 and 1957
Through Four Columbus, Ohio Supermarkets

R. W. Sherman and H. C. Williams

Sale of cut flowers, potted flowering and foliage plants was started in the fall of 1953 in two Columbus, Ohio supermarkets to determine the extent of demand for small inexpensive units through mass marketing outlets. Also involved was the determination of effect of price on sales, problems of packaging, delivery and display.

In the fall of 1955 outlets were increased to include four supermarkets in widely separated locations in Columbus. Sales through the three stores in 1955 and four stores in 1956 and 1957 were high enough to represent a reliable index of public response. Two of the stores included for three years are located in high income areas. The other, where sales have also been carried on for three years, is in a medium income area. The fourth store added in 1956 is also in a medium income area. All stores draw customers from a wide area and the difference in sales cannot be accounted for by location alone. Throughout this report all reference to stores will mean these three supermarkets for 1955 and four supermarkets for 1956 and 1957 in metropolitan Columbus, Ohio.

Flowers and plants sold through these stores were produced mostly in The Ohio State University greenhouses. When more were necessary they were obtained from commercial producers.

All cut flowers and most small potted mums and azaleas were marketed in cellophane bags measuring 5" x 6" x 20". Cost of the bags plus labor used in bagging was 4 to 5 cents per unit. A few offerings of unbagged, 3 1/2 inch potted mums were made but required daily watering which increased labor costs. Bagged mums kept almost equally well in the store with or without refrigeration.

This report is the first comprehensive analysis of sales through the four supermarkets and attempts to shed light on the extent of demand through mass marketing outlets.

Total Sales

Tables I and II show total sales of potted plants and cut flowers in units and value.

Table I

Unit Sales of Cut Flowers and Potted Plants in 3 Stores in 1955
and 4 Stores in 1956 and 1957

Year	Potted Plants			Cut Flowers			Total Units Sold
	Number of Stores Selling	Units Sold	Units Per Store	Number of Stores Selling	Units Sold	Units Per Store	
1955	3	6,064	2,021	2	3,843	1,921	9,907
1956	4	17,883	4,471	2	4,485	2,242	22,368
1957	4	34,722	8,681	2	5,082	2,541	39,804

Table II

Retail Value of Cut Flowers and Potted Plants Sold
in 3 Stores in 1955 and 4 Stores in 1956 and 1957

Year	Potted Plants				Cut Flowers				Total Value
	Number of Stores	Total Value	Value Per Store	Value Per Unit	Number of Stores	Total Value	Value Per Store	Value Per Unit	
1955	3	\$ 3,859.89	\$1,286.63	\$.637	2	\$2,962.67	\$1,481.33	\$.771	\$ 6,822.56
1956	4	9,575.15	2,393.79	.535	2	3,558.65	1,779.32	.793	13,133.80
1957	4	14,914.21	3,728.55	.429	2	3,927.48	1,963.74	.773	18,841.69

Total number of units sold and value of sales are of interest only to show what was sold with the combination of offerings made. Value per store is shown for potted plants and cut flowers separately. Averages including both would be misleading since cuts were offered only in two stores.

Number of units sold per store increased by 201 percent from 1955 to 1957 while value of sales per store increased 107 percent in the same period. Average value per unit of all units sold was 68.9 cents in 1955, 58.7 cents in 1956 and 47.3 cents in

1957. This decrease in average value per unit was the result of adding several popular, low-priced items such as coleus and other small foliage plants and small potted geraniums. The increase in sale of coleus, which made up a fourth of the total number of units sold in 1957, was responsible for almost one half of the difference in average value per unit between 1955 and 1957.

Some things which may be largely responsible for the increase in volume of sales are: 1) addition of variety in offerings, 2) increased acceptance by the public of small plants and flowers for the home, 3) better display techniques and 4) better selection of species and varieties from experience gained from sales in the past.

Monthly Sales

The number of units sold each month is given in Tables III, IV and V. Improvement in seasonal sales pattern of 1956 and 1957 over 1955 was brought about mostly by the addition of items more in demand in summer, such as geraniums and coleus.

Table III

Unit Sales of Potted Plants and Cut Flowers in Three
Columbus, Ohio Supermarkets, 1955

Month	Potted Plants		Cut Flowers ^{1/}		Total	
	Units	Percent of Year	Units	Percent of Year	Units	Percent of Year
January	442	7.3	393	10.2	835	8.4
February	890	14.7	498	12.9	1,388	14.0
March	1,355	22.3	633	16.5	1,988	20.1
April	758	12.5	521	13.6	1,279	12.9
May	552	9.1	329	8.6	881	8.9
June	292	4.8	167	4.3	459	4.6
July	111	1.8	119	3.1	230	2.3
August	113	1.9	100	2.6	213	2.2
September	275	4.5	185	4.8	460	4.7
October	303	5.0	230	6.0	533	5.4
November	452	7.5	295	7.7	747	7.5
December	521	8.6	373	9.7	894	9.0
Total	6,064	100.0	3,843	100.0	9,907	100.0

^{1/} In two stores only.

Table IV

Unit Sales of Potted Plants and Cut Flowers in Four
Columbus, Ohio Supermarkets, 1956

Month	Potted Plants		Cut Flowers ^{1/}		Total	
	Units	Percent of Year	Units	Percent of Year	Units	Percent of Year
January	611	3.4	488	10.9	1,099	4.9
February	1,210	6.8	597	13.4	1,807	8.1
March	2,052	11.5	742	16.6	2,794	12.5
April	1,481	8.3	516	11.6	1,997	8.9
May	2,028	11.3	482	10.2	2,510	11.2
June	1,721	9.6	163	3.7	1,884	8.4
July	1,484	8.3	131	2.9	1,615	7.2
August	1,023	5.7	136	3.1	1,159	5.2
September	1,245	7.0	168	3.8	1,413	6.3
October	1,814	10.1	233	5.2	2,047	9.2
November	1,593	8.9	450	10.1	2,043	9.2
December	1,621	9.1	379	8.5	2,000	8.9
Total	17,883	100.0	4,485	100.0	22,368	100.0

^{1/} Two stores only.

Table V

Unit Sales of Potted Plants and Cut Flowers in
Columbus, Ohio Supermarkets, 1957

Month	Potted Plants ^{1/}		Cut Flowers ^{2/}		Total	
	Units	Percent of Year	Units	Percent of Year	Units	Percent of Year
January	1,520	4.4	620	12.2	2,140	5.4
February	2,358	6.8	781	15.3	3,139	7.9
March	2,996	8.6	767	15.1	3,763	9.8
April	3,256	9.4	603	11.9	3,859	9.7
May	6,211	17.9	445	8.8	6,656	16.7
June	4,182	12.0	185	3.6	4,367	11.0
July	2,552	7.3	157	3.1	2,709	6.8
August	2,252	6.5	178	3.5	2,430	6.1
September	2,277	6.6	198	3.9	2,475	6.2
October	2,859	8.2	281	5.5	3,140	7.9
November	2,297	6.6	578	11.4	2,875	7.2
December	1,962	5.7	289	5.7	2,251	5.7
Total	34,722	100.0	5,082	100.0	39,804	100.0

^{1/} Four stores.

^{2/} Two stores.

Producers are interested in a more even monthly distribution in units sold and also in dollar volume which would allow more efficient use of greenhouse space and of labor throughout the year. The lowest month's receipts (shown in Tables VI, VII, and VIII) expressed as percent of average for the year, was more than twice as high in 1957 as in 1955. This change came almost entirely from increased sales of potted plants. Only about 14 percent of income from cut flowers was realized in the four month period of June through September of all three years. For these same months, potted plant sales increased from 11.5 percent of the total year's sales value in 1955 to 24.3 percent in 1957. The monthly volume of sales of cut flowers changed but little from 1955 to 1957.

More experimentation seems desirable to determine if seasonal sales can be improved further. Summer sales volume can be increased by (1) varying the offerings or by (2) lowering prices per unit on those items for which there is an elastic demand. Lowering of prices is worth while only so long as the price covers variable costs and therefore cost figures would be valuable in guiding such procedure. Both methods of increasing summer sales will be explored further to determine their possibilities.

Table VI
Retail Value of Potted Plants and Cut Flowers Sold Through
Supermarkets in Columbus, Ohio, 1955, 1956 and 1957

Month	1955, 3 Stores		1956, 4 Stores		1957, 4 Stores	
	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales
January	\$ 620.35	9.1	\$ 864.51	6.6	\$ 1,213.30	6.4
February	1,058.23	15.5	1,414.53	10.8	2,169.55	11.5
March	1,337.12	19.6	2,124.75	16.2	2,391.63	12.8
April	876.91	12.9	1,221.78	9.3	2,042.72	10.8
May	577.39	8.4	1,502.10	11.4	2,675.81	14.2
June	294.31	4.3	946.54	7.2	1,568.63	8.3
July	155.40	2.3	690.85	5.3	909.91	4.8
August	141.27	2.1	507.71	3.9	842.20	4.5
September	287.90	4.2	576.07	4.4	872.35	4.6
October	346.67	5.1	899.73	6.8	1,189.90	6.3
November	489.23	7.2	1,071.71	8.1	1,332.19	7.1
December	637.78	9.3	1,313.52	10.0	1,633.50	8.7
Total	6,822.56	100.0	13,133.80	100.0	18,841.69	100.0

Table VII

Retail Value of Potted Plants Sold Through Supermarkets in
Columbus, Ohio, 1955, 1956 and 1957

Month	1955, 3 Stores		1956, 4 Stores		1957, 4 Stores	
	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales
January	\$ 314.18	8.2	\$ 480.19	5.0	\$ 723.90	4.9
February	667.01	17.3	939.80	9.8	1,545.26	10.4
March	856.15	22.2	1,529.57	16.0	1,797.60	12.0
April	473.82	12.3	808.54	8.5	1,574.05	10.6
May	322.18	8.3	1,113.52	11.6	2,312.56	15.5
June	165.48	4.3	817.67	8.5	1,422.58	9.5
July	63.69	1.6	589.46	6.2	782.48	5.2
August	66.67	1.7	403.07	4.2	706.58	4.7
September	152.05	3.9	448.15	4.7	725.93	4.9
October	174.17	4.5	718.96	7.5	985.21	6.6
November	266.68	6.9	720.61	7.5	919.17	6.2
December	337.81	8.8	1,004.61	10.5	1,418.89	9.5
Total	3,859.89	100.0	9,575.15	100.0	14,914.21	100.0

Table VIII

Retail Value of Cut Flowers Sold Through Two Supermarkets in
Columbus, Ohio, 1955, 1956 and 1957

Month	1955		1956		1957	
	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales	Value of Sales	Percent of Year's Sales
January	\$ 306.17	10.3	\$ 384.32	10.8	\$ 489.40	12.5
February	391.22	13.2	474.73	13.4	624.29	15.9
March	480.97	16.2	595.18	16.7	594.03	15.1
April	403.09	13.6	413.24	11.6	468.67	11.9
May	255.21	8.6	388.58	10.9	363.25	9.2
June	128.83	4.4	127.87	3.6	146.05	3.7
July	91.71	3.1	101.39	2.8	127.43	3.3
August	74.60	2.5	104.64	2.9	135.62	3.5
September	135.85	4.6	127.92	3.6	146.42	3.7
October	172.50	5.8	180.77	5.1	204.69	5.2
November	222.55	7.5	351.10	9.9	413.02	10.5
December	299.97	10.2	308.91	8.7	214.61	5.5
Total	2,962.67	100.0	3,558.65	100.0	3,927.48	100.0

Cut Flower Sales

Cut flowers were sold in two stores only since assured available supply was not great enough for all stores included in the study. There were never enough available to supply holiday demands completely and on several occasions, in January, February, March and April, week-end demand could not be supplied fully. Very few carnations were available during summer months, and as a result the summer demand for them was not determined.

Data in Tables IX, X and XI are concerned with only carnations, chrysanthemums and roses which accounted for about 98% of total cut flower sales.

Prior to January, 1957, roses were offered only in packages of six hybrid tea roses or 12 sweetheart roses. Beginning in January, 1957, packages of nine hybrid tea roses and of nine sweethearts were added to the offerings. Carnations were sold exclusively in units of six. Chrysanthemums were offered in units of sufficient size to approximate the flower surface of six carnations. All cut flowers were held under refrigeration in the store. Maximum stem length possible in the 20" bags was about 12-14 inches.

Losses amounted to 15 percent of offerings except for January, February and March when losses were below 10 percent. Most of the losses consisted of roses which were offered in about the same quantity each week throughout the year.

Table IX
Units and Value of Roses, Carnations and Cut Chrysanthemums Sold in
Two Columbus, Ohio Supermarkets in 1955

Month	Roses		Carnations		Chrysanthemums		Total	
	Units	Value	Units	Value	Units	Value	Units	Value
January	76	\$ 67.64	99	\$ 88.11	218	\$ 150.42	393	\$ 306.17
February	94	76.06	182	161.98	222	153.18	498	391.22
March	105	82.05	166	147.74	345	238.05	616	467.84
April	81	62.69	164	145.96	244	168.36	489	377.01
May	20	17.80	115	102.35	186	128.34	321	248.49
June	31	27.59	37	32.93	99	68.31	167	128.83
July	37	31.53	18	16.02	64	44.16	119	91.71
August	44	35.76	1	.89	55	37.95	100	74.60
September	57	45.93	8	7.12	120	82.80	185	135.85
October	63	51.27	35	30.15	132	91.08	230	172.50
November	68	56.72	65	54.05	162	111.78	295	222.55
December	102	89.18	139	119.71	132	91.08	373	299.97
Total	778	644.22	1,029	907.01	1,979	1,365.51	3,786	2,916.74

Table X

Units and Value of Roses, Carnations and Cut Chrysanthemums Sold in
Two Columbus, Ohio Supermarkets in 1956

Month	Roses		Carnations		Chrysanthemums		Total	
	Units	Value	Units	Value	Units	Value	Units	Value
January	89	\$ 79.21	149	\$ 132.61	250	\$ 172.50	488	\$ 384.32
February	105	93.45	209	186.01	283	195.27	597	474.73
March	176	156.64	240	213.60	326	224.94	742	595.18
April	152	135.29	134	119.26	230	158.70	516	413.25
May	146	129.94	123	109.47	184	126.96	453	366.37
June	57	50.73	20	17.80	86	59.34	163	127.87
July	55	48.95	-	-	76	52.44	131	101.39
August	54	48.06	-	-	82	56.58	136	104.64
September	60	53.40	-	-	108	74.52	168	127.92
October	89	79.21	11	9.79	133	91.77	233	180.77
November	104	92.56	99	88.11	247	170.43	450	351.10
December	43	38.27	194	172.66	141	97.29	378	308.22
Total	1,130	1,005.71	1,179	1,049.31	2,146	1,480.74	4,455	3,535.76

Table XI

Units and Value of Roses, Carnations and Cut Chrysanthemums Sold in
Two Columbus, Ohio Supermarkets in 1957

Month	Roses		Carnations		Chrysanthemums		Total	
	Units	Value	Units	Value	Units	Value	Units	Value
January	89	\$ 72.61	255	\$ 226.95	248	\$ 171.12	592	\$ 470.68
February	134	102.46	377	335.53	270	186.30	781	624.29
March	169	126.81	369	328.41	181	124.89	719	580.11
April	112	85.88	220	195.80	271	186.99	603	468.67
May	95	70.55	256	227.84	94	64.86	445	363.25
June	98	79.62	32	28.48	55	37.95	185	146.05
July	89	70.81	-	-	48	33.12	137	103.93
August	112	90.08	-	-	66	45.54	178	135.62
September	83	66.87	1	.89	114	78.66	198	146.42
October	93	73.17	9	8.01	179	123.51	281	204.69
November	165	127.25	4	3.56	409	282.21	578	413.02
December	77	60.53	39	34.71	173	119.37	289	214.61
Total	1,316	1,026.64	1,562	1,390.18	2,108	1,454.52	4,986	3,871.34

Both carnations and mums were offered in solid color and combination color packs. Combination color packs accounted for 45 percent of carnation sales and for 41 percent of cut mum sales. During 1957 when roses were offered the units of 6 accounted for 58 percent of sales. Units of roses sold increased by 70 percent, carnations by 52 percent and chrysanthemums by only 7 percent from 1955 to 1957.

Potted Plant Sales

Sales of potted plants increased from 2,021 units per store in 1955 to 8,681 units per store in 1957 - an increase of 329 percent. Value at retail increased by 190 percent per store. The average price per unit fell from 63.7 cents in 1955 to 42.9 cents in 1957 largely due to an increase in sales of low price units such as coleus and small geraniums.

Chrysanthemums in 3 1/2 inch pots were offered every day throughout the three years and constituted more than 40 percent of units sold and of 43 percent of value. Table XII lists all potted plant sales by specie along with the percent of total represented by each.

Table XII

Sales of Potted Plants in Columbus, Ohio Supermarkets for
Three Year Period (1955-1957) by Specie

Specie	Unit Sales		Value of Sales	
	Number	Percent	Dollars	Percent
3 1/2 Potted Mum	23,575	40.2	\$12,250.10	43.2
Coleus	17,074	29.1	4,352.29	15.4
Geranium	8,459	14.4	3,950.19	13.9
Foliage	2,529	4.3	1,038.51	3.7
Cyclamen	2,357	4.0	2,125.63	7.5
Azaleas	1,632	2.8	2,021.29	7.1
Poinsettias	1,253	2.1	1,427.65	5.0
Caladium	759	1.3	371.71	1.3
Begonia	440	.7	171.60	.6
Asters	244	.4	129.96	.5
Hydrangeas	111	.2	178.48	.6
Large Mums	98	.2	189.97	.7
Lilies	57	.1	76.10	.3
Fuchsias	49	.1	33.81	.1
Cineraria	32	.1	31.99	.1
Total	58,669	100.0	28,349.25	100.0

The fact that some of the flowering plants are seasonal accounts for their low percentage of total sales. Also, several of the plants listed in Table XII were available only in limited quantity. This was particularly true of geraniums and foliage plants. The fact that almost 96 percent of all sales value was accounted for by 7 items indicates that while a wide variety of offerings may increase sales, a fairly small number might be considered enough for practical offerings.

Table XIII

Monthly Sales and Value of 3 1/2" Potted Mums in Three Stores in 1955 and Four Stores in 1956 and 1957

Month	1955		1956		1957	
	Units	Value	Units	Value	Units	Value
January	353	\$ 208.27	387	\$ 228.33	496	\$ 292.64
February	561	330.99	456	269.04	572	337.48
March	563	332.17	840	495.60	796	453.64
April	656	387.04	929	527.56	1,180	658.20
May	518	305.62	926	546.34	1,272	710.08
June	258	152.22	298	175.82	1,556	622.84
July	102	60.18	305	165.75	961	374.79
August	113	66.67	339	159.81	816	318.24
September	224	132.16	443	215.57	1,032	402.48
October	280	165.20	970	470.70	1,352	527.28
November	452	266.68	877	497.93	1,135	554.05
December	443	261.37	540	318.60	574	258.76
Total	4,523	2,668.57	7,310	4,071.05	11,742	5,510.48

Potted Mum Sales

Average unit sales of small potted mums per week per store were 29 in 1955, 35 in 1956 and 56 in 1957. Sales fell so radically in the summer months of 1955 and 1956 that it was thought desirable to lower prices starting in June of 1957, in an attempt to hold volume. The price was cut by approximately one third from July through October with a resultant heavy increase in sales. The results were so promising in indicating an elastic demand that it is planned to test the demand in a scientific design in the future.

During the three years included in this report, only a few mums grown in pots larger than 3 1/2 inches were offered. Demand for the limited number of larger units

offered indicated that they should be added in larger numbers to determine their place in the mass market.

Varieties of Potted Mums Sold

During the three years 1955-1957, a total of 72 varieties of 3 1/2 inch potted mums were offered. Seven varieties accounted for about 70 percent of total sales. Yellow varieties accounted for 40 percent of sales. Of the yellow varieties, the Bonnaffon Deluxe was by far the most popular and Yellow Delaware was second. At times, when the quality was very good for Yellow Delaware, it was accepted almost as well as Bonnaffon Deluxe. Among the pink varieties Portrait, Queen of the Pinks, Criterion and Blue Ribbon were the most popular. Oregon, Little America and Wilson's White were most popular among white varieties.

Single stemmed standards disbudded to one flower in the 3 1/2 inch pot were tried in 1956 and 1957 and sold well for several months, after which the sales declined and their production and sale were discontinued.

While no controlled study was made of effect of offering of variety, observation indicated that at least five or six varieties and colors should be offered for best results. Offerings in this study usually included at least this number of varieties at all times.

Extent of loss of items offered through mass marketing outlets is important because of the low price and margins necessary in such outlets. However, this study as conducted thus far has not been designed to determine what losses may be expected when sales are made on a strictly commercial operation. Rather, it has been the intention to determine the extent of the demand. At all times a full supply of small potted chrysanthemums was maintained in the store with resultant unnecessary losses. New varieties were constantly offered to determine their acceptance. This also resulted in some losses which could have been prevented.

During 1955 and 1956 losses of 3 1/2 inch potted mums amounted to 17.4 percent while in 1957 when sales were much higher the loss was 11.7 percent. For the three

years 14.7 percent of deliveries were lost. In no instance were prices reduced in an attempt to move the mums which had been in the store too long - such mums were thrown away. The increased sales in 1957 were largely responsible for the lower loss experience.

Sale by Time of Week

Tables XIV through XVIII show sales of all flowers and plants per week and the percent sold during the first and last half of the week.

Percent of sales during the first three days of the week increased during the period 1955 through 1957. This trend was more pronounced with potted plant sales than with cuts as is shown in Tables XVII and XVIII. Reason for this shift was not determined. Deliveries were made in the same manner throughout the three years and displays were handled in the same way. In 1955 the sale of flowers and plants occurring in the first and last half of the week was closely in line with the same breakdown of total supermarket sales. In 1957 sales of flowers and plants in the first half of the week increased to 37 percent which is higher than for supermarkets' sales as a whole. Once reason for this shift is determined, there might possibly be something of value to apply to merchandising other products through supermarkets.

The variation among months in the sales for the first and last half of the week can be accounted for largely by holiday dates and varying number of weekends in the months. This variation is shown in Table XV.

Table XIV

Dollar Value of Cut Flower and Potted Plant Sales at Retail Per Week Per Store
at Three Columbus Stores in 1955 and Four Stores in 1956 and 1957

Month	1955	1956	1957
January	\$49.62	\$ 49.87	\$ 70.00
February	88.18	84.87	135.60
March	98.08	118.15	137.98
April	65.44	73.30	117.99
May	45.66	86.65	154.38
June	22.64	54.61	94.11
July	12.44	41.44	51.15
August	10.46	28.20	46.79
September	23.04	36.00	52.33
October	26.66	49.98	66.10
November	39.14	64.30	79.93
December	47.24	78.81	98.01

Table XV

Percent of Cut Flowers and Potted Plants Sold During First Half and Last Half of Week in Four Columbus Stores, 1955-1957

Month	Cut Flowers ^{1/}		Potted Plants		All Plants and Flowers	
	First Half	Last Half	First Half	Last Half	First Half	Last Half
January	34	66	34	66	34	66
February	37	63	34	66	35	65
March	26	74	29	72	28	71
April	27	73	33	67	32	68
May	27	73	38	62	36	64
June	26	74	35	65	34	66
July	31	69	43	57	42	58
August	22	78	32	68	31	69
September	21	79	28	72	27	73
October	32	68	37	63	37	63
November	29	71	36	64	34	66
December	27	73	37	63	34	66
Average	28	72	35	65	34	66

^{1/} Two stores.

Table XVI

Percent of Cut Flower Sales by Time of Week in One Store ^{1/}

Month	1955		1956		1957	
	First 3 Days	Last 3 Days	First 3 Days	Last 3 Days	First 3 Days	Last 3 Days
January	32	68	33	67	41	59
February	34	66	41	59	39	61
March	36	64	26	74	27	73
April	22	78	32	68	34	66
May	23	77	36	64	28	72
June	35	65	16	84	27	73
July	33	67	40	60	35	65
August	21	79	24	76	25	75
September	18	82	25	75	20	80
October	42	58	36	67	32	68
November	43	57	28	72	23	77
December	23	77	33	67	35	68
Year	31	69	32	68	32	68

^{1/} Only one store sold cut flowers for all three years. Purpose of this table is to show variation throughout the entire period.

Table XVII

Percent of Cut Flowers and Potted Plants Sold During
First and Last Half of Week, All Stores

Year	Cut Flowers		Potted Plants		All Flowers and Plants	
	First Half	Last Half	First Half	Last Half	First Half	Last Half
1955	27	73	27	73	27	73
1956	29	71	32	68	31	69
1957	31	69	38	62	37	63

Table XVIII

Percent of Cut Flowers and Potted Plants Sold During
First and Last Half of Week by Store, 1955-1957

Year	Store #1		Store #2		Store #3		Store #4	
	First Half	Last Half	First Half	Last Half	First Half	Last Half	First Half	Last Half
1955	29	71	23	77	28	72	--	--
1956	34	66	24	76	33	67	31	69
1957	39	61	32	68	36	64	37	63

Conclusions

From the sale of cut flowers and potted flowering and foliage plants during the years for which the records are analyzed in this report several conclusions can be reached.

1. Based on sales in the four Columbus, Ohio, supermarkets the sales potential would be at least \$100,000,000 if offered in all supermarkets in the United States.
2. The response in sales to lowering prices per unit was such that for most species offered the greatest total income would be realized at the lower prices with the resultant high volume.
3. Sales volume was increased by offering a variety of color and of species at the same time.
4. Seasonal flowers such as poinsettias at Christmas time were found to be profitable items with heavy volume.
5. Proper offerings in the summer months can almost double sales for these months.
6. Sales of flowers and plants offered in this study followed closely the pattern of total sales in the supermarket by day of week. However, items such as roses, with a relatively low volume of sales early in the week can be profitably offered only from Thursday through Saturday.
7. Sales per square foot of display area were about the same as for the average of all supermarket items.